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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/508,886	09/23/2004	Masayuki Adachi	5404/91	3640

757 7590 01/22/2007

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EXAMINER	
PIZIALI, ANDREW T	
ART UNIT	PAPER NUMBER
1771	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/22/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/508,886	ADACHI ET AL.	
	Examiner	Art Unit	
	Andrew T. Piziali	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 December 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/11/2006 has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is not clear if the applicant is claiming that the fiber (capable of) melting is capable of covering the halogen-containing flame resistant fiber upon melting or if the claimed covering is somehow occurring prior to melting. It is noted that the specification does not appear to elaborate on how the fiber "covers around" the halogen-containing flame resistant fiber but applicant's arguments (see 12/11/2006 REMARKS, second paragraph) suggest that the applicant intends to claim the fiber (capable of) melting is capable of covering the halogen-containing flame resistant fiber upon melting. Claim clarification is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,348,796 to Ichibori et al. (hereinafter referred to as Ichibori) in view of USPN 6,335,093 to Mori et al. (hereinafter referred to as Mori).

Regarding claims 1-3, Ichibori discloses a flame resistant union fabric obtained by co-weaving: (A) a fiber yarn comprising 30% to 70% by weight of the union fabric, which has as a principal component, a halogen-containing flame resistant fiber including an antimony compound 25 parts to 50 parts in an acrylic based copolymer 100 parts consisting of acrylonitrile 30% to 70% by weight, a halogen-containing vinyl based monomer 30% to 70% by weight, and a vinyl based monomer copolymerizable therewith 0% to 10% by weight; and (B) a yarn comprising 70% to 30% by weight of the union fabric, consisting of a cellulosic fiber (see entire document including column 2, lines 3-16, column 3, lines 6-17, column 5, lines 17-30, and claims 1-13).

Ichibori discloses that yarn (B) may consist of cellulosic fiber (column 4, lines 59-68 and claims 1-13), but Ichibori does not appear to mention the use of a compound yarn (B) consisting of cellulosic fiber and a fiber having a melting temperature of 200°C to 400°C. Mori discloses that it is known in the cellulosic fiber woven fabric art to improve weft bar, appearance, dimensional stability, and strength by using a compound yarn consisting of cellulosic fiber and a

fiber having a melting temperature of 200°C to 400°C (see entire document including column 1, lines 15-27, column 2, line 59 through column 3, line 3, column 5, lines 15-37, column 8, lines 49-56, column 20, lines 43-45, and column 23, lines 32-36). It is noted that Mori specifically mentions the use of nylon 6 and nylon 66 (column 5, lines 14-20) which each have a melting temperature of 200°C to 400°C (see current specification page 8, lines 18-23). It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the cellulosic yarns from compound yarns consisting of cellulosic fiber and a fiber having a melting temperature of 200°C to 400°C, as taught by Mori, because the compound yarns would improve weft bar, appearance, dimensional stability, and strength and because it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability and desired characteristics.

The prior art does not specifically disclose that the resulting fabric would be flame resistant to an extent sufficient to pass France's Class M1 in the NF-P 92-503 Combustion Test, but considering that the fabric taught by the applied prior art is identical to the claimed fabric, the fabric taught by the applied prior art appears to be inherently flame resistant to an extent sufficient to pass France's Class M1 in the NF-P 92-503 Combustion Test.

The prior art does not specifically mention that the fibers (capable of) melting are capable of covering the halogen-containing flame resistant fibers upon melting, but considering that the fibers taught by the applied prior art are identical to the claimed fibers (polyamide), the fibers taught by the applied prior art appear to be inherently capable of covering around the halogen-containing flame resistant fiber upon melting.

The Patent and Trademark Office can require applicants to prove that prior art products do not necessarily or inherently possess characteristics of claimed products where claimed and prior art products are identical or substantially identical, or are produced by identical or substantially identical processes; burden of proof is on applicants where rejection based on inherency under 35 U.S.C. § 102 or on prima facie obviousness under 35 U.S.C. § 103, jointly or alternatively, and Patent and Trademark Office's inability to manufacture products or to obtain and compare prior art products evidences fairness of this rejection, *In re Best, Bolton, and Shaw*, 195 USPQ 431 (CCPA 1977).

Regarding claim 2, Ichibori discloses the cellulosic fiber may be cotton, rayon, acetate, or the like (column 4, line 59 through column 5, line 3). In addition, Mori discloses that it is known in the art to use cellulosic filaments such as polynosic or cupro (column 4, lines 54-67). It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the cellulosic fiber from any suitable cellulosic material, such as polynosic or cupro, because they are functionally equivalent viable alternatives to the cellulosic fibers disclosed by Ichibori and because it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability and desired characteristics.

Regarding claim 3, Mori discloses the use of polyamide fibers (column 5, lines 14-20).

Response to Arguments

6. Applicant's arguments filed 12/11/2006 have been fully considered but they are not persuasive.

The applicant asserts that the fibers disclosed by Mori are unable to cover the surface of the co-exist fibers when melted because polyethylene terephthalate has a lower viscosity in a melting state than that of polyamides. Applicant's argument is not persuasive because Mori specifically mentions the use of polyamides (column 5, lines 14-20) and Example 9 of Mori specifically includes a polyamide.

The applicant appears to be arguing unexpected results by asserting that Mori does not teach or suggest that the melting fiber may cover around the halogen-containing flame resistant fiber to improve heat resistance of the fabric, but the applicant fails to show, or attempt to show, that the increase of heat resistance is unexpected or that the increase of heat resistance is unexpected to a level sufficient to rebut prima facie obviousness. The discovery of an undisclosed property of a known material does not provide a patentable distinction over the art of record.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew T. Piziali whose telephone number is (571) 272-1541. The examiner can normally be reached on Monday-Friday (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

atp

1/12/07

ANDREW PIZIALI
PRIMARY EXAMINER